

10/033,835

FILE 'CAPLUS' ENTERED AT 12:43:01 ON 26 SEP 2004

| | |
|-----|------------------------------------|
| L2 | 32211 S E1-45 |
| L3 | 20532 S NICOTINAMIDE |
| L4 | 1444 S PYRIDINECARBOXAMIDE |
| L5 | 72 S NICOTINIC AMIDE |
| L6 | 26577 S CYCLODEXTRIN |
| L7 | 80 S L6 AND (L2 OR L3 OR L4 OR L5) |
| L8 | 220520 S SOLUBILITY |
| L9 | 1 S SOLUBILATION |
| L10 | 8 S SOLUBILIZATION |
| L11 | 72326 S SOLUBILIZ? |
| L12 | 603030 S SOLUBLE |
| L13 | 24 S L7 AND (L8 OR L11 OR L12) |

L13 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:499151 CAPLUS
 TITLE: Formulation of caffeine nasal sprays and its enhanced permeation through rabbit nasal mucosa
 AUTHOR(S): Noh, Eun Sun; Chun, In Koo
 CORPORATE SOURCE: College of Pharmacy, Dongduk Women's University, Seoul, 136-714, S. Korea
 SOURCE: Yakche Hakhoechi (2004), 34(2), 131-138
 CODEN: YAHAE; ISSN: 0259-2347
 PUBLISHER: Korean Society of Pharmaceutics
 DOCUMENT TYPE: Journal
 LANGUAGE: Korean

AB This study was aimed to investigate the feasibility of nasal delivery of caffeine for the elimination of sleepiness. The effects of various vehicles, solubilizers, and enhancers on the permeation of caffeine through rabbit nasal mucosa was observed. The permeation study was carried out using a Franz-type permeation system at 37°C, and the amount of caffeine permeated through the rabbit nasal mucosa was determined by a validated HPLC. The apparent soly. and physicochem. stability of caffeine in various nasal formulations were determined. The effect of hydrotropes and modified cyclodextrins on the soly. of caffeine in water was determined by equilibrium soly. method. The soly. of caffeine in water was 29 mg/mL at 30°C. The addition of sodium benzoate and nicotinamide at 10% improved the soly. of caffeine (115 and 132 mg/mL, resp.) in aqueous solution. The flux of caffeine through the nasal mucosa from aqueous solution was 2.1 ± 0.26 mg/cm²/h. The addition of sodium benzoate reduced its permeation (1.4 ± 0.01 mg/cm²/h), but sodium benzoate with 5% 2HPβCD and 0.03% monoterpenes increased its permeation (2.4 ± 0.04 mg/cm²/h) markedly. The addition of nicotinamide also increased its permeation (2.5 ± 0.36 mg/cm²/h). As the concentration of caffeine in nasal formulation increased, the permeation flux increased linearly. Caffeine was stable physicochem. and enzymically in the nasal mucosa extract at 37°C. These results suggest that caffeine can be efficiently delivered nasally and the development of nasal formulation will be feasible.

L13 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:898322 CAPLUS
 DOCUMENT NUMBER: 139:386366
 TITLE: Puerarin injection and its preparation
 INVENTOR(S): Zhang, Jianqiang; Zhang, Jianli; Wu, Yalu
 PATENT ASSIGNEE(S): Sihuan Kebao Pharmaceutical Co., Ltd., Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| CN 1389211 | A | 20030108 | CN 2002-126319 | 20020718 |
| PRIORITY APPLN. INFO.: | | | CN 2002-126319 | 20020718 |

AB The injection is composed of puerarin, dissoln. adjuvant, antioxidant, and excipient. The ratio of puerarin to dissoln. adjuvant is 1:2-3.5. The dissoln. adjuvant is nicotinamide, sol. polyvinylpyrrolidone, and/or hydroxypropyl-beta-cyclodextrin. The antioxidant is N₂, CO₂, Na₂SO₃, Na₂S₂O₅, Na₂S₂O₃, or EDTA-Na₂. The excipient is mannitol, lactose, sorbitol, or low mol. dextran.

L13 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:678498 CAPLUS
 DOCUMENT NUMBER: 139:202506
 TITLE: Pharmaceutical composition comprising riboflavin 5'-monophosphate and solubilized riboflavin
 INVENTOR(S): Grobin, Adam; Hird, Geoffrey; Lambert, Bill; Onai, Katsumi; Pullen, Stuart
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 14 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

 US 2003162751 A1 20030828 US 2001-24877 20011219
 PRIORITY APPLN. INFO.: US 2001-24877 20011219
 AB In recognition of the need to facilitate the use of riboflavin as a pharmaceutical and addnl. to increase the efficacy and stability of water sol. forms of riboflavin (that may contain precipitated riboflavin or that are subject to photodegrdn.), the present invention provides solubilized riboflavin, methods for solubilizing riboflavin, kits comprising solubilized riboflavin and provides photostable compns. comprising riboflavin and derivs. A composition containing riboflavin 5'-phosphate sodium and sucrose was prepared

L13 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:678288 CAPLUS
 DOCUMENT NUMBER: 139:202459
 TITLE: Solubilized riboflavin
 INVENTOR(S): Hird, Geoffrey; Lambert, Bill
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003161871 | A1 | 20030828 | US 2001-24876 | 20011219 |

PRIORITY APPLN. INFO.: US 2001-24876 20011219
 AB To facilitate the use of riboflavin as a pharmaceutical and addnl. to increase the efficacy of water sol. forms of riboflavin (that may contain precipitated riboflavin), the present invention provides solubilized riboflavin, methods for solubilizing riboflavin and kits comprising solubilized riboflavin. A vial contained riboflavin 5'-phosphate sodium 419.2, sucrose 800.0, sodium hydroxide 23.64, hydrochloric acid, and water 7229 mg which was then lyophilized.

L13 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:586095 CAPLUS
 DOCUMENT NUMBER: 140:352858
 TITLE: Potential of enzyme mimics in biomimetic sensors: a modified-cyclodextrin as a dehydrogenase enzyme mimic
 AUTHOR(S): Katakay, Ritu; Morgan, Edward
 CORPORATE SOURCE: Department of Chemistry, University of Durham, Durham, DH1 3LE, UK
 SOURCE: Biosensors & Bioelectronics (2003), 18(11), 1407-1417
 CODEN: BBIOE4; ISSN: 0956-5663
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB This paper reports the application of a dehydrogenase enzyme mimic as a biomimetic sensor. The model compound investigated was a β -cyclodextrin (β -CD) derivative with a nicotinamide group attached to the secondary face of a β -CD (g). It was envisaged that the nicotinamide group would act as the electron transfer agent and that the cyclodextrin would provide a suitable hydrophobic cavity for the reaction to take place in. Ethanol, propranolol, dopamine and acetone were used as substrates in backgrounds of hydrophilic and hydrophobic anions. Electrochem. and fluorescence techniques were used to study the catalytic effects in solution. It was found that the size of the analyte and the hydrophobicity of the anion affected the catalytic activity of the dehydrogenase mimic. Catalytic effects were most enhanced with ethanol and dopamine in presence of larger and more strongly solvated anions, SO_4^{2-} and H_2PO_4^- which are excluded from the cavity. The mol. was also immobilized in a sol-gel matrix and investigated as a sol-gel electrochem. biomimetic sensor. Concentration dependence with increasing aliquots of ethanol was observed. These results indicated that a re-usable biomimetic sensor is indeed feasible.
 REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2003:492700 CAPLUS
 DOCUMENT NUMBER: 139:41867
 TITLE: Aqueous compositions containing metronidazole
 INVENTOR(S): Chang, Yunik; Dow, Gordon J.

PATENT ASSIGNEE(S): Dow Pharmaceutical Sciences, USA
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003119783 | A1 | 20030626 | US 2001-33835 | 20011224 |
| WO 2003057135 | A2 | 20030717 | WO 2002-US36063 | 20021107 |
| WO 2003057135 | A3 | 20031218 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-33835 A 20011224

AB An aqueous solution of metronidazole in which the concentration of metronidazole is >0.75% is disclosed. The solution contains a combination of soly .-enhancing agents, one of which is a cyclodextrin such as β - cyclodextrin and the second is a compound other than a cyclodextrin. Methods of manufacture and therapeutic use of the solution are disclosed. A gel contained methylparaben 0.15, propylparaben 0.05, phenoxethanol 0.7, edetate sodium 0.05, hydroxyethyl cellulose 1.25, β - cyclodextrin 0.5, niacinamide or niacin 1.0, and water qs to 100.00%.

L13 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:72162 CAPLUS
 DOCUMENT NUMBER: 136:107569
 TITLE: Gel compositions containing metronidazole and hydroxypropyl- β - cyclodextrin
 INVENTOR(S): Chang, Yunik; Dow, Gordon J.; Angel, Arturo
 PATENT ASSIGNEE(S): Dow Pharmaceutical Sciences, USA
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|----------|
| WO 2002006349 | A1 | 20020124 | WO 2001-US19644 | 20010619 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6468989 | B1 | 20021022 | US 2000-615169 | 20000713 |
| EP 1303541 | A1 | 20030423 | EP 2001-948497 | 20010619 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004515463 | T2 | 20040527 | JP 2002-512249 | 20010619 |
| PRIORITY APPLN. INFO.: | | | US 2000-615169 A | 20000713 |
| | | | WO 2001-US19644 W | 20010619 |

AB An aqueous solution of metronidazole in which the concentration of metronidazole is >0.75 is described. The solution contains the soly. enhancer hydroxypropyl- β - cyclodextrin (I) and may addnl. contain niacinamide. Methods of manufacture and therapeutic use of the solution are disclosed. Thus, a stable 1.0% aqueous gel composition contained metronidazole 1.00, I 5.00, methylparaben 0.15, propylparaben 0.03, glycerin 5.00, hydroxyethyl cellulose 1.50, disodium edetate 0.05, and water qs to 100%.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:380370 CAPLUS
 DOCUMENT NUMBER: 135:9995
 TITLE: Pharmaceuticals containing sildenafil for treating male erectile dysfunction
 INVENTOR(S): Vallabhaneni, Ramakrishna Rao
 PATENT ASSIGNEE(S): Natco Pharma Ltd., India
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| WO 2001035926 | A2 | 20010525 | WO 2000-IN105 | 20001024 |
| WO 2001035926 | A3 | 20011227 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1237538 | A2 | 20020911 | EP 2000-990872 | 20001024 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| PRIORITY APPLN. INFO.: | | IN 1999-MA1128 | A 19991118 | |
| | | WO 2000-IN105 | W 20001024 | |

AB The invention relates to a novel pharmaceutical composition containing sildenafil useful for nasal administration in the treatment of male erectile dysfunction due to a variety of causes. The composition is also effective in patients with erectile dysfunction due to spinal cord injury. The pharmaceutical composition is in the form of a solution or a colloidal dispersion in a vehicle filled into a specially designed dosing device for nasal administration. The invention also provides a method for preparing the composition containing sildenafil for nasal application for the treatment of male erectile dysfunction. Thus, a formulation contained sildenafil citrate 10.000, PEG-300 30.000, glycerol 20.000, and HCl 10.000% and water to 1.0 mL.

L13 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:457628 CAPLUS
 DOCUMENT NUMBER: 131:204473
 TITLE: Increased aqueous solubility of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine by coprecipitating with various pharmaceutical carriers
 AUTHOR(S): Planinsek, Odon; Pisek, Robert; Kristl, Albin; Schmidt, Peter C.; Srcic, Stanko
 CORPORATE SOURCE: Faculty of Pharmacy, University of Ljubljana, Ljubljana, 1000, Slovenia
 SOURCE: Acta Pharmaceutica (Zagreb) (1999), 49(2), 89-98
 CODEN: ACPHEE; ISSN: 1330-0075
 PUBLISHER: Croatian Pharmaceutical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine, which is a modified N-acetylmuramyl-L-alanyl-D-isoglutamine (MDP, the smallest immunol. active glucopeptide's subunit of the bacterial cell wall), was chosen after immunorestitution tests for further preclin. testing. For the preparation of an appropriate parenteral formulation, the soly. of the compound has to be increased. For this purpose different phys. mixts. and solid dispersions prepared by solvent evaporation method with different carriers were investigated. The soly. of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine increased from 0.16 g L-1 to 27 g L-1 for the dispersion with nicotinamide, to 40 g L-1 for the dispersion with sodium salicylate and to 24 g L-1 for the complex with 2-hydroxypropyl- β -cyclodextrin.

L13 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:172599 CAPLUS
 DOCUMENT NUMBER: 130:213640
 TITLE: New pharmaceutical compositions of meloxicam with improved solubility and bioavailability
 INVENTOR(S): Struengmann, Andreas; Freudensprung, Brigitte;

PATENT ASSIGNEE(S): Klokckers, Karin
 SOURCE: Hexal A.-G., Germany
 PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9909988 | A1 | 19990304 | WO 1998-EP5456 | 19980827 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2301304 | AA | 19990304 | CA 1998-2301304 | 19980827 |
| AU 9894374 | A1 | 19990316 | AU 1998-94374 | 19980827 |
| AU 750125 | B2 | 20020711 | | |
| ZA 9807800 | A | 19990609 | ZA 1998-7800 | 19980827 |
| EP 1007049 | A1 | 20000614 | EP 1998-947467 | 19980827 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9812018 | A | 20000926 | BR 1998-12018 | 19980827 |
| JP 2001513563 | T2 | 20010904 | JP 2000-507378 | 19980827 |
| NZ 502990 | A | 20020201 | NZ 1998-502990 | 19980827 |
| US 6284269 | B1 | 20010904 | US 2000-486463 | 20000510 |
| PRIORITY APPLN. INFO.: | | | EP 1997-114816 | A 19970827 |
| | | | WO 1998-EP5456 | W 19980827 |

AB Pharmaceutical compns. containing enolic carboxamide type antiinflammatory agent meloxicam that exhibit improved wettability, aqueous soly., dissoln. behavior over a broad range of pH, and that are prepared by crystal structure modification of the drug through dry or wet mech. homogenization with two further components - one of them is selected from a group of oligo - and dissoln. improving, or alkalizing agent. The application of the formulations according to the present invention results in an improved bioavailability and effectiveness of meloxicam. Thus, 16 g hydroxypropyl β -cyclodextrin was mixed with 1.8 g of meloxicam and the mixture was then further co-milled for 3 h at 25° to reach desired metastable phys. state. A hydrogel formulation contained above powder 100.0, hydroxypropyl Me cellulose 21.0, propylene glycol 2500.0, PEG-7-glycerol conconate 300.0, iso-Pr alc. 500.0, and water 6385.0 mg.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1999:58864 CAPLUS
 DOCUMENT NUMBER: 130:100701
 TITLE: Soluble, gum-containing, coated chewable tablet
 INVENTOR(S): Gergely, Gerhard; Gergely, Irmgard; Gergely, Thomas
 PATENT ASSIGNEE(S): Austria
 SOURCE: Eur. Pat. Appl., 11 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 890358 | A1 | 19990113 | EP 1997-111783 | 19970710 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| WO 9902137 | A1 | 19990121 | WO 1998-EP3306 | 19980603 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 2003206948 | A1 | 20031106 | US 2003-407134 | 20030407 |

PRIORITY APPLN. INFO.:

EP 1997-111783 A 19970710
 WO 1998-EP3306 A2 19980603
 US 2000-479224 B1 20000107

AB Coated chewable pharmaceutical tablets are provided which dissolve and release their active ingredients over a period of several minutes, leaving no residue. These tablets are prepared by mixing powdered chewable components (e.g. polysaccharide gums, dried sugar syrups, sol. cellulose derivs.) with liquid syrups (e.g. sugar, sugar alc., or gelatin syrups) and fatty or waxy components (e.g. beeswax, triglyceride fats, solid paraffin, ozocerite) to form a crumbly mass which is cooled to <0°, ground, compressed into tablets at <10°, and coated. The tablets have a moisture content of .apprx.4-7%; the moisture is immobilized by cooling, becomes mobile on heating during compression, and provides the required softness on contacting the water-sol. ingredients by converting them to a highly viscous, thixotropic, chewable mass. Thus, tablets were prepared containing spray-dried gum arabic 16.50, glycerin 0.30, rice starch 7.80, dried glucose syrup 25.00, beeswax 0.95, hydrogenated coconut oil 5.60, liquid glucose syrup 35.95, aspartame 0.30, Maltrin M700 7.475, and salbutamol sulfate 0.125%.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:724416 CAPLUS

DOCUMENT NUMBER: 128:16342

TITLE: Increasing solubility of
 N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine in water solutions

AUTHOR(S): Planinsek, O.; Srcic, S.; Kristl, A.

CORPORATE SOURCE: Faculty of Pharmacy, Univ. of Ljubljana, Ljubljana, 1000, Slovenia

SOURCE: Farmaceutski Vestnik (Ljubljana) (1997), 48(Pos. Stev.), 274-275

CODEN: FMVTAV; ISSN: 0014-8229

PUBLISHER: Slovensko Farmacevtsko Drustvo

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Using carriers nicotinamide, Na salicylate, 2-hydroxypropyl β -cyclodextrin (HPC) and lecithin, the water soly of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine (I) was increased. Results show a nonequil. state and they decrease after a certain time. However, the solubilities remain higher than soly. of pure I which can be attributed to disruption of the water structure. Complexes were formed in the case of Na salicylate, nicotinamide, and HPC, and vesicles were formed in the case of lecithin.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:244371 CAPLUS

DOCUMENT NUMBER: 126:229664

TITLE: Methods for making hardly soluble medicine
 amorphous

INVENTOR(S): Miyamoto, Misao; Oda, Toshihisa

PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan; Miyamoto, Misao; Oda, Toshihisa

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 9706781 | A1 | 19970227 | WO 1996-JP2246 | 19960808 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA | | | | |
| TW 487582 | B | 20020521 | TW 1996-85109577 | 19960807 |
| CA 2228907 | AA | 19970227 | CA 1996-2228907 | 19960808 |
| AU 9666693 | A1 | 19970312 | AU 1996-666693 | 19960808 |
| AU 702088 | B2 | 19990211 | | |
| EP 852140 | A1 | 19980708 | EP 1996-926600 | 19960808 |

EP 852140 B1 20031203
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 CN 1192677 A 19980909 CN 1996-196203 19960808
 CN 1089232 B 20020821
 RU 2167649 C2 20010527 RU 1998-103876 19960808
 EP 1356807 A2 20031029 EP 2003-16608 19960808
 EP 1356807 A3 20040128
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 AT 255405 E 20031215 AT 1996-926600 19960808
 US 6462093 B1 20021008 US 1998-11060 19980206
 NO 9800549 A 19980402 NO 1998-549 19980209
 PRIORITY APPLN. INFO.: JP 1995-205936 A 19950811
 JP 1995-310400 A 19951129
 JP 1995-310401 A 19951129
 EP 1996-926600 A3 19960808
 WO 1996-JP2246 W 19960808

AB A process for preparing a solid dispersion of a hardly sol.
 medicine, comprises heating or mechanochem. treating the hardly
 sol. medicine, an amorphism-inducing agent, and an amorphism
 stabilizer. These processes make it possible to make hardly sol
 . medicines amorphous at a temperature lower than those employed in the
 conventional methods. The solid dispersions of the amorphous hardly
 sol. medicines thus obtained have an improved mucosal or rectal
 absorption rate, which makes it possible to elevate their bioavailability.
 A blend containing nifedipine (m.p. 175°) 10, succinic acid (m.p.
 192°) 10, and HPMC-AS 20 g was mixed with 5 g water and subjected
 to wet granulation and heating to 160° for 1 h. Amorphization of
 the mixture of nifedipine/succinic acid started at 158°.

L13 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:740260 CAPLUS
 DOCUMENT NUMBER: 126:9479
 TITLE: Environmentally friendly nontoxic water-
 soluble cleaning compositions for release of
 polymers from surfaces
 INVENTOR(S): Sakata, Shigenobu
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 08239693 | A2 | 19960917 | JP 1995-81645 | 19950302 |
| PRIORITY APPLN. INFO.: | | | JP 1995-81645 | 19950302 |

AB The compns. comprise Na chondroitinsulfate (I), cyclodextrin
 (II), xanthan gum (III), xylan, xylose, Na pantothenate (IV), Na pyruvate
 (V), Na erythorbate (VI), 4-isopropyltropone (VII), H₂O, benzyl alc.
 (VIII), and iso-PROH and optionally contain monosaccharides,
 polysaccharides, antioxidants, lactic acids, preservatives, bactericides,
 secondary alcs., higher alcs., amino alcs., and/or microorganisms. An aqueous
 solution containing 70% mixture of I ≤25, xylan 0.1-0.5, xylose 0.1-0.5,
 glucose 0.1-0.5, III 0.1-0.5, II 1-3, VII 0.01-0.05, IV 1-5, V 1-5, VI
 1-5, 10% VIII, and 20% iso-PROH exhibited good polymer release properties
 on contacting a polymer coating on a metal surface with the solution for 5-10
 min at room temperature

L13 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:175664 CAPLUS
 DOCUMENT NUMBER: 118:175664
 TITLE: Effect of hydrotropic substances on the complexation
 of clotrimazole with β- cyclodextrin
 AUTHOR(S): Pedersen, Morten
 CORPORATE SOURCE: Dep. Pharm., R. Dan. Sch. Pharm., Copenhagen, DK 2100,
 Den.
 SOURCE: Drug Development and Industrial Pharmacy (1993),
 19(4), 439-48
 CODEN: DDIPD8; ISSN: 0363-9045
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The phase diagrams of clotrimazole/β- cyclodextrin
 (β-CD) in phosphate buffer, pH 7.1, containing 0.5M various hydrotropic
 agents were constructed. The water structure disruptors, urea and

nicotinamide, increased the intrinsic soly. of the antimycotic drug clotrimazole, while the water structure forming agents, sorbitol and fructose, decreased the soly. Concerning the complex constant between clotrimazole and β -CD, it was the other way around. The connection between the slopes of the phase diagrams, the intrinsic soly. of clotrimazole and the complex constant was discussed. Nicotinamide decreased the soly. of β -CD in the buffer solution. The results reported in this study are in disagreement with the claim that addition of water structure forming agents to cyclodextrin solns. can be used to increase the total soly. of drugs.

L13 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:530982 CAPLUS
DOCUMENT NUMBER: 115:130982
TITLE: Separation of water- and fat-soluble vitamins by micellar electrokinetic chromatography
AUTHOR(S): Ong, C. P.; Ng, C. L.; Lee, H. K.; Li, S. F. Y.
CORPORATE SOURCE: Dep. Chem., Natl. Univ. Singapore, 0511, Singapore
SOURCE: Journal of Chromatography (1991), 547(1-2), 419-28
CODEN: JOCRAM; ISSN: 0021-9673
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A mixture of 7 water- and 2 fat-sol. vitamins was successfully separated simultaneously by micellar electrokinetic capillary chromatog. In addition to SDS, modifiers such as γ -cyclodextrin, β -cyclodextrin, and iso-PrOH were introduced into the electrophoretic media to investigate their effect on the overall separation of the 9 vitamins. Among these modifiers, the combination of γ -cyclodextrin with SDS in the electrophoretic medium provided the best selectivity for separating vitamins.

L13 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:478756 CAPLUS
DOCUMENT NUMBER: 115:78756
TITLE: Effect of hydrotropic substances on the complexation of sparingly soluble drugs with cyclodextrin derivatives and the influence of cyclodextrin complexation on the pharmacokinetics of the drugs
AUTHOR(S): Mueller, B. W.; Albers, E.
CORPORATE SOURCE: Dep. Pharm., Christian Albrecht Univ., Kiel, D-2300/1, Germany
SOURCE: Journal of Pharmaceutical Sciences (1991), 80(6), 599-604
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The influence of hydrotropic compds. on complex formation by 2-hydroxypropyl β -cyclodextrin (HP- β -CD) was investigated with methyltestosterone (MeT). Various representatives of the lyotropic series were used for this purpose. Additive hydrotropic effects were observed for nicotinamide and urea, which disrupt the water structure, while structure formers such as sorbitol exerted neg. effects. The effects of hydrotropic substances on the phase soly. relationships of MeT showed that inclusion complex formation with HP- β -CD depends on the degree of ordering of the solvent and is apparently subject to entropy effects. Combined systems comprising HP- β -CD and excipients with various underlying solubilizing principles were also investigated. Combination of HP- β -CD with conventional solubilizers, such as 1,2-propylene glycol or sodium deoxycholate, reduced the solubilization capacity of HP- β -CD. Competitive displacement of the inclusion mol. from its HP- β -CD complex by sodium deoxycholate suggested that cholesterol participates in the release mechanism of the inclusion mol. under in vivo conditions. The spontaneous release of complexed drug mols. could indirectly be shown on the basis of the spontaneous action of a complexed dihydropyridine derivative after i.v. administration in rats. The bioavailability of an investigational drug in cynomolgus monkeys could be enhanced sevenfold by inclusion complexation with HP- β -CD.

L13 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:435645 CAPLUS
DOCUMENT NUMBER: 115:35645
TITLE: Oversaturated solutions of drug in hydroxypropyl cyclodextrins: parenteral preparation of pancratistatin
AUTHOR(S): Torres-Labandeira, Juan J.; Davignon, Paul; Pitha,

CORPORATE SOURCE: Josef
 SOURCE: Health NIA, Natl. Inst., Baltimore, MD, 21224, USA
 Journal of Pharmaceutical Sciences (1991), 80(4),
 384-6
 CODEN: JPMSAE; ISSN: 0022-3549
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The effect of 15 cyclodextrin derivs. (polar-electroneutral, cationic, anionic, and lipophilic) and of three 2-hydroxypropyldigitonins on the soly. of pancratistatin (I), an anticancer drug, was evaluated. The direct solubilization into aqueous solns. were invariably low (0.1-1.2 mg/mL compared with 50 µg/mL in water). Complexes of I with hydroxypropyl β- cyclodextrin were more stable (Kapp 153 M-1) than those with hydroxypropyl γ- cyclodextrin (Kapp 108 M-1). Acceptable preps. were made by dissoln. of I in a large excess (50+) of hydroxypropyl cyclodextrin by ammonia and then freeze drying to ammonia-free preps. In these preps., both the inclusion and interdispersion phenomena were operative, and the preps. dissolved rapidly forming clear solns. of I of concns. up to 9 mg/mL. These solns. were oversatd. and while those based on hydroxypropyl β- cyclodextrin precipitated within 1 h, those based on hydroxypropyl γ- cyclodextrin were stable for at least 4 h when kept in a plastic container (i.e., time sufficient for potential use in parenteral preps.).

L13 ANSWER 19 OF 24 CAPLUS. COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:49567 CAPLUS
 DOCUMENT NUMBER: 114:49567
 TITLE: Dihydropyridine derivative redox systems for
 brain-targeted drug delivery
 INVENTOR(S): Bodor, Nicholas S.
 PATENT ASSIGNEE(S): University of Florida, USA
 SOURCE: Eur. Pat. Appl., 120 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| EP 327766 | A2 | 19890816 | EP 1988-312016 | 19881219 |
| EP 327766 | A3 | 19900926 | | |
| EP 327766 | B1 | 19980408 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| US 5002935 | A | 19910326 | US 1987-139755 | 19871230 |
| CA 1331564 | A1 | 19940823 | CA 1988-585791 | 19881213 |
| AT 164855 | E | 19980415 | AT 1988-312016 | 19881219 |
| ES 2118707 | T3 | 19981001 | ES 1988-312016 | 19881219 |
| AU 8827339 | A1 | 19890706 | AU 1988-27339 | 19881221 |
| AU 619788 | B2 | 19920206 | | |
| ZA 8809679 | A | 19900829 | ZA 1988-9679 | 19881228 |
| JP 01294663 | A2 | 19891128 | JP 1989-37 | 19890104 |
| JP 3038715 | B2 | 20000508 | | |
| EP 335545 | A2 | 19891004 | EP 1989-302719 | 19890320 |
| EP 335545 | A3 | 19900926 | | |
| EP 335545 | B1 | 19930609 | | |
| EP 335545 | B2 | 19980923 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 90200 | E | 19930615 | AT 1989-302719 | 19890320 |
| ES 2058503 | T3 | 19941101 | ES 1989-302719 | 19890320 |
| AU 8931762 | A1 | 19890727 | AU 1989-31762 | 19890328 |
| AU 618995 | B2 | 19920116 | | |
| US 5017566 | A | 19910521 | US 1989-431222 | 19891103 |
| US 5024998 | A | 19910618 | US 1989-448655 | 19891211 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1987-139755 | A 19871230 |
| | | | US 1988-174945 | A 19880329 |
| | | | CA 1988-585791 | A 19881213 |
| | | | IE 1988-3717 | A 19881213 |
| | | | EP 1988-312016 | A 19881219 |
| | | | IE 1989-810 | A 19890314 |
| | | | EP 1989-302719 | A 19890320 |
| | | | US 1989-431222 | A2 19891103 |

AB Inclusion complexes of hydroxypropyl, hydroxyethyl, glucosyl, maltosyl or maltotriosyl derivs. of β- or γ- cyclodextrin with the reduced, biooxidizable, blood-brain barrier penetrating, lipoidal forms of dihydropyridine pyridinium salt redox systems for brain-targeted drug delivery provide a means for stabilizing the redox systems,

particularly against oxidation. The redox inclusion complexes also provide a means for decreasing initial drug concns. in the lungs after administration of the systems, leading to decreased toxicity. In selected instances, complexation results in substantially improved water soly. of the redox systems as well. The dihydropyridine lipidal forms are e.g. 1-methyl-3-[[N-β-[3,4-bis(pivalyloxy)phenyl]ethylcarbamamoyl}}-1,4-dihydropyridine and 3-hydroxy-17β-[(methyl-1,4-dihydropyridin-3-yl)carbonyl]oxyetra-1,3,5(10)-triene (E2-CDS). Thus, the soly. of E2-CDS-2-hydroxypropyl β - cyclodextrin complexes was .apprx.30 mg/mL vs. 0.0002 mg/mL for E2-CDS. In Sprague-Dawley rats, the lung level of an quaternary ammonium salt after i.v. administration of the complex was lower than that after i.v. administration of E2CDS.

L13 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:12071 CAPLUS

DOCUMENT NUMBER: 114:12071

TITLE: Molecular behavior and dissolution characteristics of uracil in ground mixtures

AUTHOR(S): Baba, Kazuhiko; Takeichi, Yohichiro; Nakai, Yoshinobu

CORPORATE SOURCE: Pharm. Res. Lab., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1990), 38(9), 2542-6

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Ground mixts. containing uracil were prepared by using various additives such as celluloses, proteins, cyclodextrins, enteric-coating agents and inorg. compds. in a planetary ball mill. The amorphous state of uracil was observed in the x-ray diffraction patterns of some of the ground mixts. The results of IR anal. indicated deprotonation of uracil after 30 h grinding with Na polyglutamate. All ground mixts. showed the transient supersatn. of uracil in dissoln. studies. The initial amount of uracil dissolved from the 30-h ground mixts. with Na benzoate derivs., Et cellulose, hydroxypropyl Me cellulose acetate succinate and proteins was 2.5-9-fold that dissolved from intact uracil. The crystallinity and soly. of uracil in the ground mixts. were affected by the mixing ratio, grinding time and moisture content of the additive.

L13 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:446267 CAPLUS

DOCUMENT NUMBER: 113:46267

TITLE: Pharmaceutical formulations for parenteral use containing cyclodextrins and dihydropyridine redox systems

INVENTOR(S): Bodor, Nicholas S.

PATENT ASSIGNEE(S): University of Florida, USA

SOURCE: Eur. Pat. Appl., 125 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 335545 | A2 | 19891004 | EP 1989-302719 | 19890320 |
| EP 335545 | A3 | 19900926 | | |
| EP 335545 | B1 | 19930609 | | |
| EP 335545 | B2 | 19980923 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| US 4983586 | A | 19910108 | US 1988-174945 | 19880329 |
| EP 327766 | A2 | 19890816 | EP 1988-312016 | 19881219 |
| EP 327766 | A3 | 19900926 | | |
| EP 327766 | B1 | 19980408 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| AT 90200 | E | 19930615 | AT 1989-302719 | 19890320 |
| AU 8931762 | A1 | 19890727 | AU 1989-31762 | 19890328 |
| AU 618995 | B2 | 19920116 | | |
| CA 1336498 | A1 | 19950801 | CA 1989-594911 | 19890328 |
| JP 02009825 | A2 | 19900112 | JP 1989-77938 | 19890329 |
| JP 2643426 | B2 | 19970820 | | |
| ZA 8902315 | A | 19901228 | ZA 1989-2315 | 19890329 |
| US 5017566 | A | 19910521 | US 1989-431222 | 19891103 |
| US 5024998 | A | 19910618 | US 1989-448655 | 19891211 |
| PRIORITY APPLN. INFO.: | | | US 1988-174945 | A 19880329 |
| | | | EP 1988-312016 | A 19881219 |

10/033,835

US 1987-139755 A2 19871230
CA 1988-585791 A 19881213
IE 1988-3717 A 19881213
IE 1989-810 A 19890314
EP 1989-302719 A 19890320
US 1989-431222 A2 19891103

AB Aqueous parenteral solns. of drugs which are insol. or only sparingly sol. and/or which are unstable in water, are combined with a cyclodextrin derivative to provide a means for alleviating problems associated with drug precipitation at the injection site and/or in the lungs or other organs following parenteral administration. Another approach is use of the dihydropyridine-pyridinium redox delivery system. A large number of examples are given for synthesis of dihydropyridine and pyridinium derivs. of drugs. Data are also presented showing drug solubilization by cyclodextrin derivs.

L13 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:42623 CAPLUS
Correction of: 1989:101799

DOCUMENT NUMBER: 112:42623
Correction of: 110:101799

TITLE: Pharmaceuticals containing fat-soluble vitamins and methylated cyclodextrin to improve solubility

INVENTOR(S): Furukawa, Mikio; Hara, Kenji

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 63083021 | A2 | 19880413 | JP 1986-227712 | 19860926 |
| PRIORITY APPLN. INFO.: | | | JP 1986-227712 | 19860926 |

OTHER SOURCE(S): MARPAT 112:42623

AB An oral pharmaceutical contains fat-sol. vitamins and methylated cyclodextrin I (A = H, Me; n = 6-9). A mixture of methylated β -cyclodextrin and vitamin A in H₂O was stirred until complete dissoln. occurred. The resulting compound was used in vitamin formulation. An oral liquid contained vitamin B1 nitrate 5, vitamin B2 phosphate 5, vitamin B5 5, nicotinamide 20, inositol 50, caffeine 50, vitamin A-I inclusion compound 1, vitamin E-I inclusion compound 10, and vitamin D-I inclusion compound 0.5 mg in 100 mL H₂O.

L13 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:101799 CAPLUS

DOCUMENT NUMBER: 110:101799

TITLE: Pharmaceuticals containing fat-soluble vitamins and methylated cyclodextrin to improve solubility

INVENTOR(S): Furukawa, Mikio; Hara, Kenji

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| JP 63083021 A2 | | 19880413 | JP 1986-227712 | 19860926 |

OTHER SOURCE(S): MARPAT 110:101799

AB An oral pharmaceutical contains fat-sol. vitamins and methylated cyclodextrin I (A = H, Me; n = 6-9). A mixture of methylated β -cyclodextrin and vitamin A in H₂O was stirred until complete dissoln. occurred. The resulting compound was used in vitamin formulation. An oral liquid contained vitamin B1 nitrate 5, vitamin B2 phosphate 5, vitamin B5 5, nicotinamide 20, inositol 50, caffeine 50, vitamin A-I inclusion compound 1, vitamin E-I inclusion compound 10, and vitamin D-I inclusion compound 0.5 mg in 100 mL H₂O.

L13 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:11238 CAPLUS

DOCUMENT NUMBER: 108:11238

TITLE: Aqueous liquid preparation containing

aminobenzopyranopyridinecarboxylic acids for nose and eye drops.

INVENTOR(S): Shimizu, Hisayoshi; Oshima, Mitsuaki; Terayama, Hideo
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd. , Japan; Senju Pharmaceutical Co., Ltd.
 SOURCE: Eur. Pat. Appl., 28 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 213514 | A2 | 19870311 | EP 1986-111306 | 19860815 |
| EP 213514 | A3 | 19870722 | | |
| EP 213514 | B1 | 19900620 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| US 4728509 | A | 19880301 | US 1986-893161 | 19860805 |
| DK 8603799 | A | 19870220 | DK 1986-3799 | 19860808 |
| DK 166757 | B1 | 19930712 | | |
| NO 8603253 | A | 19870220 | NO 1986-3253 | 19860812 |
| NO 171005 | B | 19921005 | | |
| NO 171005 | C | 19930113 | | |
| AT 53944 | E | 19900715 | AT 1986-111306 | 19860815 |
| JP 62123116 | A2 | 19870604 | JP 1986-193834 | 19860818 |
| JP 04078614 | B4 | 19921211 | | |
| CA 1269618 | A1 | 19900529 | CA 1986-516160 | 19860818 |
| PRIORITY APPLN. INFO.: | | | JP 1985-182383 | 19850819 |
| | | | EP 1986-111306 | 19860815 |

AB Benzopyranopyridines I (R = C1-6 alkyl) are solubilized by polyvinylpyrrolidone, cyclodextrin, or caffeine in aqueous solution. As I have a strong antiallergic and antiinflammatory action, they are useful as eye or nose drops, or as drugs for oral application. I (R = CHMe2) (II) is especially solubilized by the addition of caffeine, β -cyclodextrin, or polyvinylpyrrolidone to its aqueous phosphate buffer solns. These compds. also improved the storage stability of II solns. at 60°. Eye drops were prepared containing II 2.5, boric acid 16, borax 7, polyvinylpyrrolidone 20, 4-HOC6H4CO2Me 0.26, 4-HOC6H4CO2Pr 0.14 g, and water to 1 L. The eyedrops were more stable and less irritating than a control which omitted polyvinylpyrrolidone.